



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,287	06/21/2003	Daniel Luch		6293

7590

09/07/2006

Daniel Luch
17161 Copper Hill Drive
Morgan Hill, CA 95037

EXAMINER

LAM, CATHY FONG FONG

ART UNIT	PAPER NUMBER
----------	--------------

1775

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,287	LUCH, DANIEL	
	Examiner	Art Unit	
	Cathy Lam	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01-10-2005</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

1. Claims 1-6 are objected to because of the following informalities: the term "DER" needs to be spelled out in its full name. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hans (US 4224118).

Hans teaches an electroplated article comprised of a metal coating(s) and a plastic substrate (col 1 L 15-16). The metal coating(s) is selectively plated over the plastic substrate (col 1 L 8-9).

Claim Rejections - 35 USC § 102/103

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawai et al (US 4425262).

Kawai teaches an electroplated article comprised of an electroconductive resin composition and a metal coating. The electroconductive resin composition is molded into a shaped article. The metal coating is directly electroplated onto the shaped resin article (col 1 L 5-13 & col 2 L 2-7). The examiner takes the meaning of "directly electroplated" as there is no surface treatment or pre-treatment step(s) exists.

Art Unit: 1775

The electroconductive resin composition has an electrical resistance of $< 300 \Omega\text{-cm}$, the electrical resistance is measured at 1 cm interval (col 3 L 22-29 & L 49-51).

Kawai is silent about the metal coating is selectively plated. The examiner is taking the position that whether metal coating is patterned or not, is part of the design scheme, and only one way or the other exists (i.e. either selectively patterned or not selectively patterned). Such design scheme is conventional.

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Adelman (US 4038042).

Adelman teaches a plastic composition which can be directly electroplated with a metal.

The plastic composition is molded into a shaped article (col 4 L 35-38). The article has a volume resistivity of less than $25 \Omega\text{-cm}$ (col 4 L 66-68).

The article is directly electroplated with a metal coating (col 7 L 20-28). The examiner takes "directly electroplated" with the meaning of no surface pre-treatment.

Adelman is silent about the metal coating is selectively coated (or patterned) over the plastic article. However, the examiner is taking the position that whether the metal coating is selectively coated or not, is one of the conventional design schemes.

Claim Rejections - 35 USC § 103

6. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al (US 4425262) or Adelman (US 4038042) in view of Hans (US 4224118) or Bogard et al (US 3772161).

Kawai and Adelman both teach an electroconductive resin composition material which is molded into an article. The resin article is directly electroplated with a metal material with any surface pre-treatment.

Kawai and Adelman however are silent about the metal coatings are selectively plated (or patterned).

Hans teaches an article comprised of a molded plastic substrate and a metal coating. The metal coating is selectively electroplated onto the surface of the plastic substrate (col 1 L 8-9 & L 15-21).

Bogard teaches a strippable masking coating for preventing metal deposited onto the thermoplastic surface. The mask (or resist) can be used in electroless deposition as well as electroplating methods (col 1 L 28-30 & L 36-40).


In view of the prior art teachings, one skill in the art would fabricate a selectively electroplated article because it is well known to pattern a layer by using a mask or a resist.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1775

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cathy Lam
Primary Examiner
Art Unit 1775

cfl
August 27, 2006